

Customer No.: 31561
Application No.: 10/604,042
Docket No.: 9265-US-PA

REMARKS**Present Status of the Application**

This is a full and timely response to the outstanding non-final Office Action mailed on July 27, 2004. The Office Action has rejected claims 1-12 under 35 U.S.C. 112, 2nd paragraph. The Office Action has also rejected claims 1-12 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) as being anticipated and unpatentable, respectively over Johnson et al. (USP 6,351,406).

Claims 1-12 remain pending of which claims 1-12 have been cancelled and claims 25-41 have been added. The specification including the drawings has also been amended to more accurately describe the invention. Support of the amendments can be found at least in paragraphs [0020] to [0025] and paragraph [0030] of the disclosure, and in the drawings. It is believed that no new matter is added by way of these amendments made to the claims or otherwise to the application.

Applicant has most respectfully considered the remarks set forth in this Office Action. Regarding the obvious rejections, it is however strongly believed that the cited references are deficient to adequately teach the claimed features as recited in the presently pending claims. The reasons that motivate the above position of the Applicant are discussed in detail hereafter, upon which reconsideration of the claims is most earnestly solicited.

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Discussion of the Claim Objection

Claim 8 is objected to because of informalities.

Claim 8 has been cancelled to render to objection moot.

Discussion of the 35 U.S.C. 112, 2nd Paragraph Rejection

Claims 1-12 are rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Examiner rejected the claims because the presentation of the presently pending claims implies a same layer belongs to both stacks and crossover itself. In response thereto, Applicants have cancelled the presently pending claims 1-12 and have added claims 25-41, amended the specification and the drawings to more accurately describe the present invention and to be more consistent with the disclosure in paragraphs [0020] to [0025] and paragraph [0030]. In essence, the specification, the claims and the drawings have been amended to read each stack comprises four layers of material, and a pattern of the top polysilicon layer of each stack is substantially conformal to a shape of an intersection between two stack lines that crossover each other. Reconsideration of the rejection is courteously requested.

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Response to 35 U.S.C. §102 & §103 rejection

Claims 1-6, 8-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson et al. (USP 6,351,406).

Claims 7-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (USP 6,351,406).

The cancellation of claims 1-12 has rendered the anticipation and the obvious rejections moot. Nevertheless, Johnson teaches that a memory cell comprises a steering element 22 and a state change element 23 stacked in a "pillar" shape arrangement and the pillars of formed in between two conductive layers that crosses over each other and perpendicular to each other (col. 5, ln. 44-47, col. 6, ln. 1-25, Fig. 4(b), 5, 6(b)-6(g)) and each pillar contains four layers of material that include a P+ doped polysilicon 40, a layer of N-doped polysilicon 41, a layer of silicon dioxide 42 and a layer of N+ doped polysilicon 43. Fundamentally, the memory structure of Johnson only have the conductive layers crossover each other, other layers in between are rectangular pieces formed basically at the interaction between two conductive layers. Therefore, Johnson fails to teach or suggest, among other things, a plurality of stack lines, wherein one stack line which comprises two polysilicon layer of one conductive type, a conductive layer and an anti-fuse layer crosses over another stack line which comprises two polysilicon layer of another conductive, another conductive layer and another anti-fuse layer.

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Therefore, Johnson fails to teach or suggest the amended claims and the present invention. Accordingly, the allowance of the newly added claims 25, 35, 40 are earnestly requested. Because claims 26-34, 36-39 and 41 are dependent upon claims 25, 35 and 40 respectively, the same reasons as discussed above also apply to these claims.

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CONCLUSION

For at least the foregoing reasons, it is believed that claims 25-41 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date :

Oct. 27, 2004

Respectfully submitted,

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